

# Problem Set No. 1

LING200, Winter 2024

This Problem Set should be submitted by 11:59PM on Sunday, February 18th. You may work on it as much or as little as you like between now and then; when you are done, don't forget to hit the "submit" button or your labor will all have been in vain. Once you hit the "submit" button, you may not return to the problem set. Your answers will be considered "submitted" (duh).

You can work on the problems using this document. A space will be set up (it will be called a "quiz", because that seems to be all Moodle really understands) where you can submit your answers. I'll try to set it up later tonight, but it might be tomorrow before it is there. In the space you will enter your answers. Good luck. Email me if you have a question.

**A.** Examine the following phonetic data from a variety of Japanese and answer the questions below regarding the status of [s] and [ʃ].

|    | A Variety of Japanese | gloss            |
|----|-----------------------|------------------|
| 1. | higaʃi                | <i>east</i>      |
| 2. | ʃiroi                 | <i>white</i>     |
| 3. | san                   | <i>three</i>     |
| 4. | futatsu               | <i>two units</i> |
| 5. | ʃimasu                | <i>do</i>        |
| 6. | sensei                | <i>teacher</i>   |
| 7. | sora                  | <i>sky</i>       |

Question 1. Are [s] and [ʃ] two different phonemes or are they allophones of a single phoneme?

- ☒ (a) They are different phonemes.
- ☐ (b) They are allophones of the same phoneme.
- ☐ (c) One cannot determine their status from the data provided.
- ☐ (d) They are both different phonemes and allophones of the same phoneme.

Question 2. A rule which could relate the two segments would be

- ☐ (a) s becomes ʃ before front vowels
- ☐ (b) s becomes ʃ before high vowels
- ☒ (c) s becomes ʃ before high, front vowels
- ☐ (d) s becomes ʃ before high, back vowels

Question 3. The *phonemic* representation of the Japanese word for 'east' should be

- (a) /higasi/
- ☒ (b) /higaʃi/
- (c) /higasʃi/
- (d) /ist/

**B.** Examine the data below from a variety of Cree and answer the questions regarding the voicing of oral stops. [Recall that the symbol ':' indicates that the preceding segment is long; it is not itself a segment.]

p t k → ∅  
b d g → v

| Cree      | gloss      | Cree        | gloss  |
|-----------|------------|-------------|--------|
| niska     | goose      | nisto       | three  |
| kodak     | another    | tʃi:gaʃigan | axe    |
| asaba:p   | thread     | adim        | dog    |
| wasko:w   | cloud      | mi:bit      | tooth  |
| paskwa:w  | prairie    | pimi:       | lard   |
| ni:gi     | my house   | mide        | heart  |
| ko:go:s   | pig        | o:gik       | these  |
| tahki     | often      | tʃi:ma:n    | canoe  |
| namwa:tʃ  | not at all | wa:bos      | rabbit |
| ospwa:gan | pipe       | na:be:w     | man    |
| mi:ʒihʃij | hand       | mi:ʒiwin    | food   |

Question 4. Which of the following statements is true?

- ☒ (a) The voiced and voiceless oral stops are in complementary distribution in this variety of Cree.
- (b) The voiced and voiceless oral stops are allophones of one another in this variety of Cree.
- (c) It is possible to predict when an oral stop is going to be voiced and when it is going to be voiceless in this variety of Cree.
- (d) All of the above.

Question 5. A rule which will account for the distribution of allophones in this data would be:

- (a) Voiceless oral stops become voiced oral stops before vowels.
- (b) Voiceless oral stops become voiced oral stops after vowels.
- (c) Voiceless oral stops become voiced oral stops between vowels.
- ☒ (d) There are no allophones in this data.

Question 6. Given the rule (or non-rule) you selected in Question 5, the phonemic representation of the Cree word for 'axe' would be:

- (a) /tʃi:kahikan/
- (b) /tʃi:gahikan/
- (c) /tʃi:kahigan/
- ☒ (d) /tʃi:gahigan/

Question 7. Given the rule (or non-rule) you selected in Question 5, the phonemic representation of the Cree word for 'thread' would be:

- (a) /asaba:b/
- (b) /asapa:p/
- ☒ (c) /asaba:p/
- (d) /asapa:b/

Question 8. Examine the affricates in the Cree data. Does the data indicate that the affricates are subject to the same rule as the voiceless oral stops?

- (a) No.
- ☒ (b) Yes.
- (c) The data does not indicate anything one way or the other.
- (d) What's an affricate, again?

tʃ  
dʒ

Question 9. Examine the fricatives in the Cree data. Does the data indicate that the fricatives are subject to the same rule as the voiceless oral stops?

(a) No.

☒ (b) Yes.

(c) The data does not indicate anything one way or the other.

(d) What's an fricative, again?

10. The word 'playfulness' has

(a) One morpheme.

(b) Two morphemes.

☒ (c) Three morphemes.

(d) Four morphemes.

11. The *-ful-* of 'playfulness' is

☒ (a) an infix.

(b) a prefix.

(c) a suffix.

(d) reduplication.

12. The *-ness* of 'playfulness' is

(a) an infix.

(b) a prefix.

☒ (c) a suffix.

(d) reduplication.